REPORT

issued by an Accredited Testing Laboratory

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Date	Reference	Page
2020-02-19	8P02735-4	1 (10)

Hydro Building Systems Sweden AB
574 81 VETLANDA

Classification of fire resistance of an aluminium framed glazed doorset in accordance with EN 13501-2:2016

(1 Appendix)

Sponsor/ owner of the report: Hydro Building Systems Sweden AB
574 81 VETLANDA
SWEDEN

Prepared by: RISE - Research Institutes of Sweden
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501 15 BORÅS
SWEDEN

Product name: WICSTYLE 77FP EI60

Classification report No.: 8P02735-4

Date of issue: February, 2020

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Accred. No. 1002
Testing
ISO/IEC 17025

1 Introduction

This classification report defines the resistance to fire classification assigned to the element WICSTYLE 77FP EI60 in accordance with the procedures given in EN 13501-2:2016.

2 Details of classified product

2.1 General

The element, WICSTYLE 77FP EI60, is defined as a hinged aluminium framed glazed doorset.

2.2 Description

The element, WICSTYLE 77FP EI60, is a hinged aluminium framed glazed doorset.
The doorset can be single- or double leaf doors.

Some typical examples of the door set are described in the test reports listed in 3.1.

This classification report only refers to the exchange of listed building hardware for the product WICSTYLE 77FP EI60. Other parameters are defined in other documentation.

The doorset can be equipped with alternative building hardware as listed in chapter 4 and in Appendix 1.

3 Test reports/extended application reports and test results in support of the classification

The following test report(s) and/or extended application report(s) are presented in support of this classification.

3.1 Test reports/extended application reports

Table: List of used accredited reports

Name of laboratory	Name sponsor/ owner of the report:	Report ref. no	Test method and date/field of extended application rules and date
RISE Research Institutes of Sweden AB	Hydro Building Systems Sweden AB	9P00160-1	September 30, 2019
RISE Research Institutes of Sweden AB	Hydro Building Systems Sweden AB	9P00160-2	October 3, 2019
ift Rosenheim GmbH	SAPA Building Systems GmbH	14-000145-PR01	October 15, 2015
MPA Braunschweig	Hydro Building Systems GmbH	(3019/8256) SN dd 14-02-2007	February 2, 2007
MPA Braunschweig	Hydro Building Systems GmbH	(3435/688/07) – NK of 07/03/2008	March 7, 2008
RISE - Research Institutes of Sweden	Hydro Building Systems Sweden AB	8P02735-3	EN 15269-5:2014 +A1:2016, February 19, 2020

3.2 Results

3.2.1 Test report 9P00160-1 – single leaf door with sidelight (basic test report)

Table: Summary test results.

Accredited test method:	EN 1634-1:2014+A1:2018
Test report and date:	9P00160-1, September 30, 2019
Test parameters:	
Test direction:	Opening out from the furnace.
Supporting construction:	Test frame with a plinth built upon the lower edge of the test frame.
Parameter:	**Result:**
Integrity:	
-Cotton pad:	61 minutes
-Gap gauges:	67 minutes
-Sustained flaming:	66 minutes
Thermal insulation:	
- I_2	63 minutes
Radiation:	67 minutes
Deflection	-

3.2.2 Test report 9P00160-2 - single leaf door with sidelight (basic test report)

Table: Summary test results.

Accredited test method:	EN 1634-1:2014+A1:2018
Test report and date:	9P00160-2, October 3, 2019
Test parameters:	
Test direction:	Opening out from the furnace.
Supporting construction:	Test frame with a plinth built upon the lower edge of the test frame.
Parameter:	**Result:**
Integrity:	
-Cotton pad:	68 minutes
-Gap gauges:	68 minutes
-Sustained flaming:	68 minutes
Thermal insulation:	
- $\mathbf{I_2}$	45 minutes
Radiation:	68 minutes
Deflection	-

3.2.3 Test report 14-000145-PR01 - double leaf door

Table: Summary test results.

Accredited test method:	EN 1634-1:2008
Test report and date:	14-000145-PR01, October 15, 2015
Test parameters:	
Test direction:	Opening out from the furnace.
Supporting construction:	Associated supporting construction, fire resistant glazing
Parameter:	**Result:**
Integrity:	
-Cotton pad:	69 minutes
-Gap gauges:	69 minutes
-Sustained flaming:	69 minutes
Thermal insulation:	
- $\mathbf{I_1}$	50 minutes
- $\mathbf{I_2}$	69 minutes
Radiation:	69 minutes
Deflection	-

3.2.4 Test report (3019/8256) – SN dd 14-02-2007 – single leaf door (door A)

Table: Summary test results.

Accredited test method:	EN 1634-1:2000
Test report and date:	(3019/8256) – SN dd 14-02-2007, February 2, 2007
Test parameters:	
Test direction:	Opening into the furnace.
Supporting construction:	175 mm masonry wall.
Parameter:	**Result:**
Integrity:	
-Cotton pad:	77 minutes
-Gap gauges:	77 minutes
-Sustained flaming:	77 minutes
Thermal insulation:	
- I_1	59 minutes
- I_2	71 minutes
Radiation:	-
Deflection	-

3.2.5 Test report (3019/8256) – SN dd 14-02-2007 – single leaf door (door B)

Table: Summary test results.

Accredited test method:	EN 1634-1:2000
Test report and date:	(3019/8256) – SN dd 14-02-2007, February 2, 2007
Test parameters:	
Test direction:	Opening out from the furnace.
Supporting construction:	175 mm masonry wall.
Parameter:	**Result:**
Integrity:	
-Cotton pad:	77 minutes
-Gap gauges:	77 minutes
-Sustained flaming:	77 minutes
Thermal insulation:	
- I_1	61 minutes
- I_2	77 minutes
Radiation:	-
Deflection	-

3.2.6 Test report (3435/688/07) – NK of 07/03/2008 – double leaf door

Table: Summary test results.

Accredited test method:	EN 1634-1:2000
Test report and date:	(3435/688/07) – NK of 07/03/2008, March 7, 2008
Test parameters:	
Test direction:	Opening out from the furnace.
Supporting construction:	175 mm masonry wall.
Parameter:	**Result:**
Integrity:	
-Cotton pad:	68 minutes
-Gap gauges:	68 minutes
-Sustained flaming:	68 minutes
Thermal insulation:	
- I_1	52 minutes
- I_2	61 minutes
Radiation:	-
Deflection	-

3.2.7 Test report 8P02735-3 – field of extended application report

Table: Field of extended application report

Field of extended application rules:	EN 15269-5:2014+A1:2016
Field of extended application report:	8P02735-3, February 19, 2020

4 Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with Clause 7 of EN 13501-2:2016.

4.2 Classification

The element, WICSTYLE 77FP EI60, is classified according to the following combinations of performance parameters and applicable classes.

Table: Classification

Fire resistance classification:
$EI_2$60 / $EI_2$60-C0

4.3 Field of application

This classification is valid for the following end-use applications in accordance with the field of direct application in EN 1634-1:2014 and the field of extended application in EN 15269-5:2014 +A1:2016:

Paragraph	Construction parameter	Valid for range
A	**Door leaf:**	
A.1	**General**	
A.1.1 / A.1.2	Number of leaves	Single- and double leaf doorset.
A.1.23	Change in latching condition	Not possible. Latching condition must be with a lock/latch, latched.
C.1.1	Alternative latches/ locks and strike plates	**Alternative locks:** ASSA ABLOY Module series: (back set 50 mm) 560, 565, 562, 1560, 6585, 2000, 8765, 504, 506, 509, 564, 1520, 8561, 1498, 2565, 6498, 5761, 8768. dormakaba DL series: DL710, DL7007, DL909*, DL912, DL919, DL9192 *only used as additional lock. ASSA ABLOY Connect series: (back set 35 and 50 mm) 212, 220, 221, 222, 223, 232, 235, 236, 340, 510, 620, 621, 622, 624, 636, 640 311*, 411*, och 711* *only used as additional lock. **Alternative electric locks:** STEP 110 STEP 120 ASSA ABLOY motor lock series**:** 840C-50, 841C35/-50*, 850-C-50, 851C-35/-50* * only used as additional lock. **Alternative electrical strike plates:** ASSA ABLOY 920-series ASSA ABLOY 960-series ROBUST 300 STEP 60 STEP 90 STEP 92 STEP 98

Paragraph	Construction parameter	Valid for range
		Alternative mount pillars: ASSA 917W, ROBUST T78, ROBUST SA72, ST 6575, ST 4001 and ST 9503-17. **Strike plates:** ASSA ABLOY locking plate Connect series ASSA ABLOY locking plate Module series Latches/ locks and strike plates according to Appendix 1.
C.1.13	Add, or exchange operating devices retaining latch/lock, for face-mounted operating device (e.g. handles, knobs, panic bars, push- or touch-pads)	Possible for metal components with any breakthrough being limited to screw fixings and their covering. Alternative operating devices according to Appendix 1.
C.1.43	Face fixed closer or automatic drive, alternative	Allowed alternative door closers: Dorma TS 83 Dorma TS 93 ASSA DC 300 ASSA DC 700 Geze TS 2000 Geze TS 4000 Geze TS 5000 Mounted on hinge side with the house fitted on the door leaf. Door coordinator: Geze ISM/ L-ISM Door closers and coordinator according to Appendix 1.
C.1.47	Power cable and protective conduits for electric lock	Allowed to use ASSA EA281.

5 Limitations

This classification document does not represent type approval or certification of the product.

RISE Research Institutes of Sweden AB
Safety - Fire Research Resistance

Performed by

Signed by: Charlotta Skarin
Reason: I am the author of this document
Date & Time: 2020-02-20 07:32:44 +01:00

Charlotta Skarin

Examined by

Signed by: Pär Johansson (BRk)
Reason: I have reviewed this document
Date & Time: 2020-02-20 07:17:07 +01:00

Pär Johansson

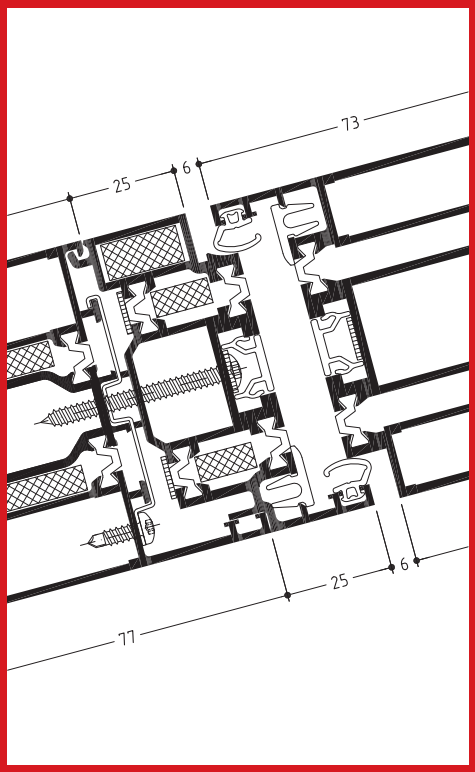
Appendix

Table: Appendix

Appendix	Description	Page
1	Drawings and specifications from the sponsor	1 – 23

WICSTYLE 77FP EI60

Fire protection system



06-2018 *EXAP - Hardware Scandinavia*

RI. SE REF: 8P02735-4

APP: 1 (23 pages)

WICONA®

TECHNIK FÜR IDEEN

WICSTYLE 77FP EI60

Hinged doors, open in, (out) installation of ASSA Classic backset 50mm

ASSA 565–50

ASSA 560–50

ASSA 562–50

ASSA 1560–50

ASSA 6585–50

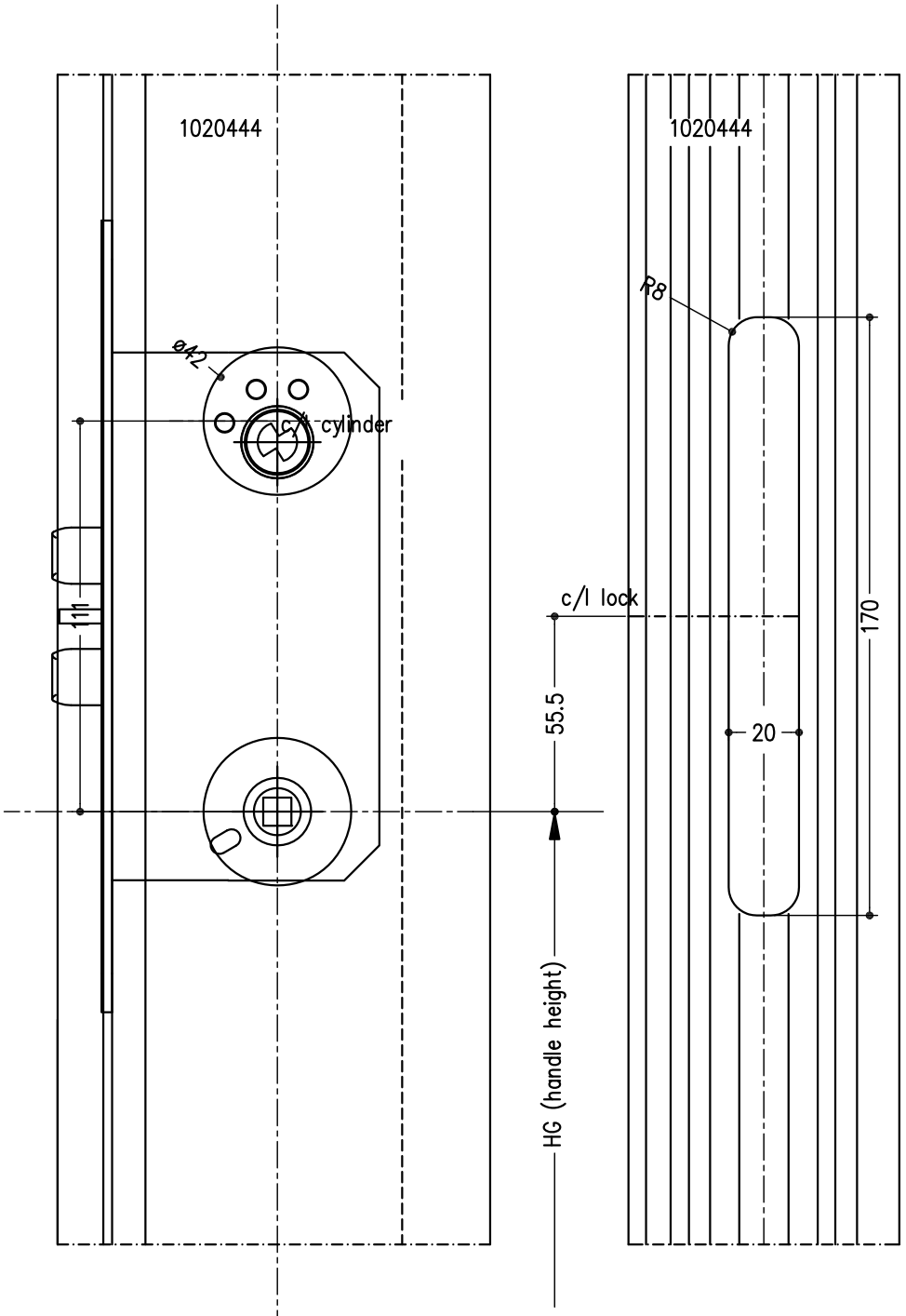
ASSA 2000–50

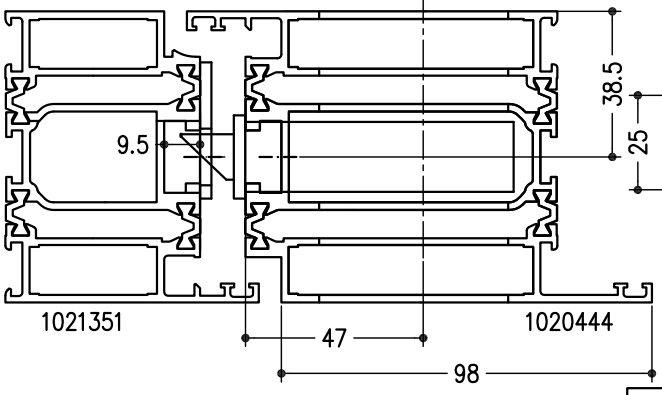
ASSA 8765–50
ASSA 504–50
ASSA 506–50
ASSA 509–50
ASSA 564–50
ASSA 1520–50

ASSA 8561–50
ASSA 8761–50
ASSA 1498–50
ASSA 2565–50
ASSA 6498–50
ASSA 5761–50
ASSA 8768–50

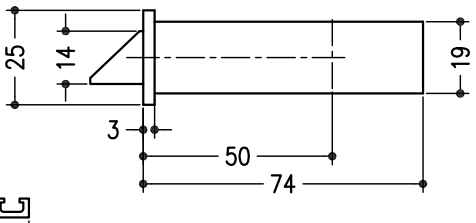
DORMA

DL710–50
DL7007–50
DL909–50
DL912–50
DL919–50
DL9192–50





ASSA Classic 50mm



Valid for outward opening and lock Classic 50mm

RISE REF: 8P02735-4
APP: 1 (23 pages)

WICSTYLE 77FP EI60

Hinged doors, open in / (out), installation of ASSA Connect 50mm

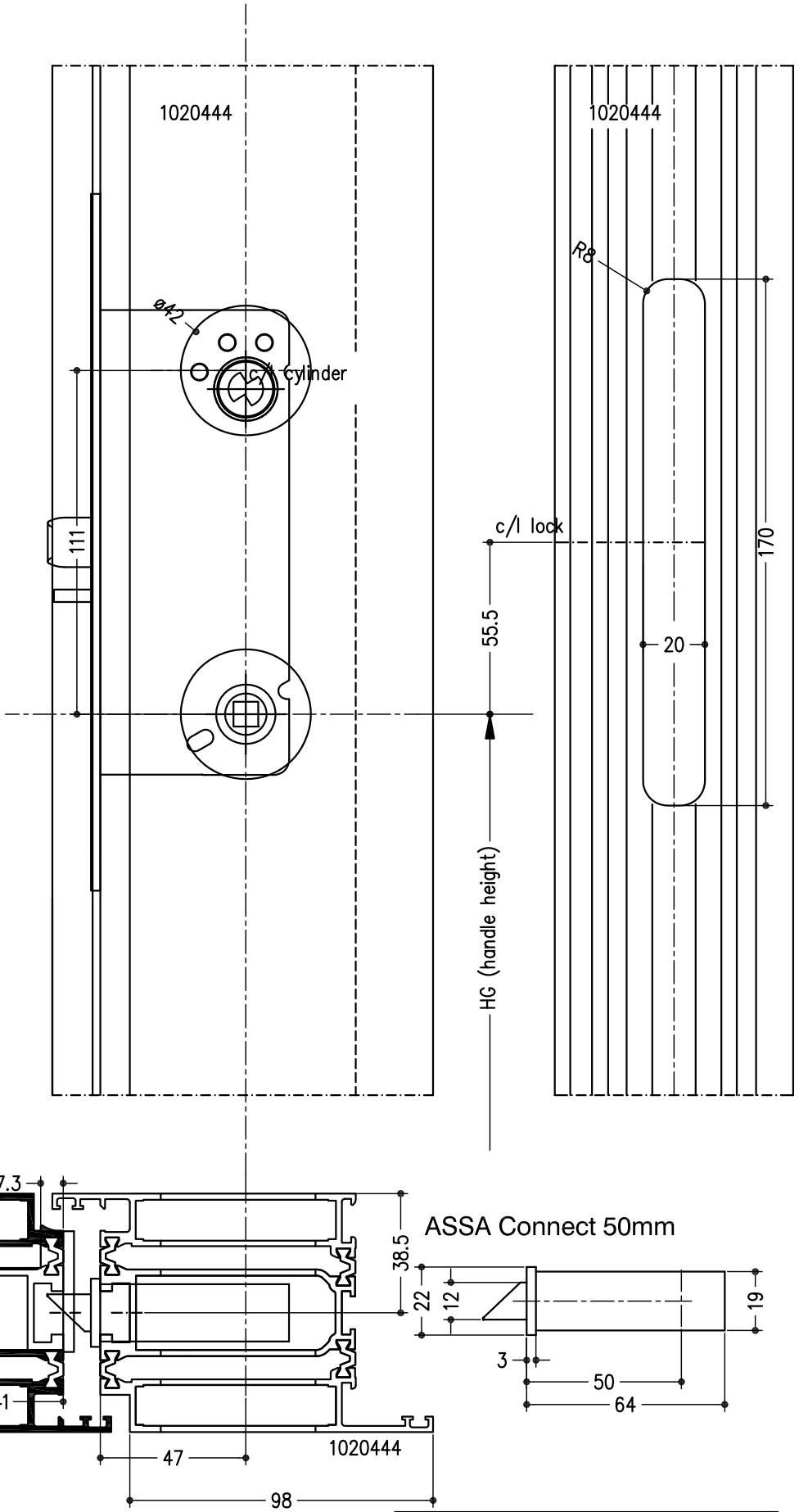
.

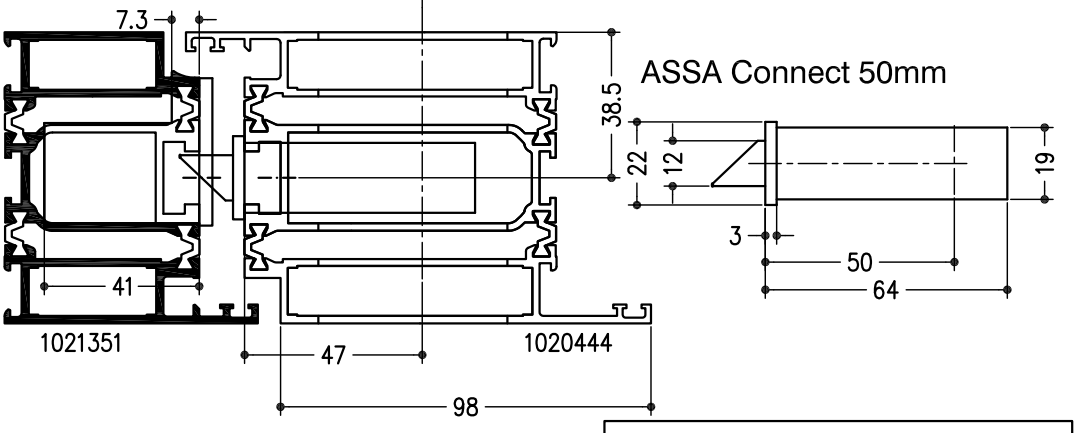
ASSA 212–50
ASSA 220–50
ASSA 221–50
ASSA 222–50
ASSA 223–50
ASSA 232–50
ASSA 235–50
ASSA 236–50

ASSA 340–50

ASSA 510–50
ASSA 620–50
ASSA 621–50
ASSA 622–50
ASSA 624–50
ASSA 636–50
ASSA 640–50
ASSA 710–50
ASSA 721–50
ASSA 722–50
ASSA 727–50
ASSA 732–50

ASSA 2500–50





Valid for outward opening and lock connect 50mm

RI SE REF: 8P02735-4
APP: 1 (23 pages)

WICSTYLE 77FP EI60

Hinged doors, open in,(out) installation of ASSA Connect 35mm

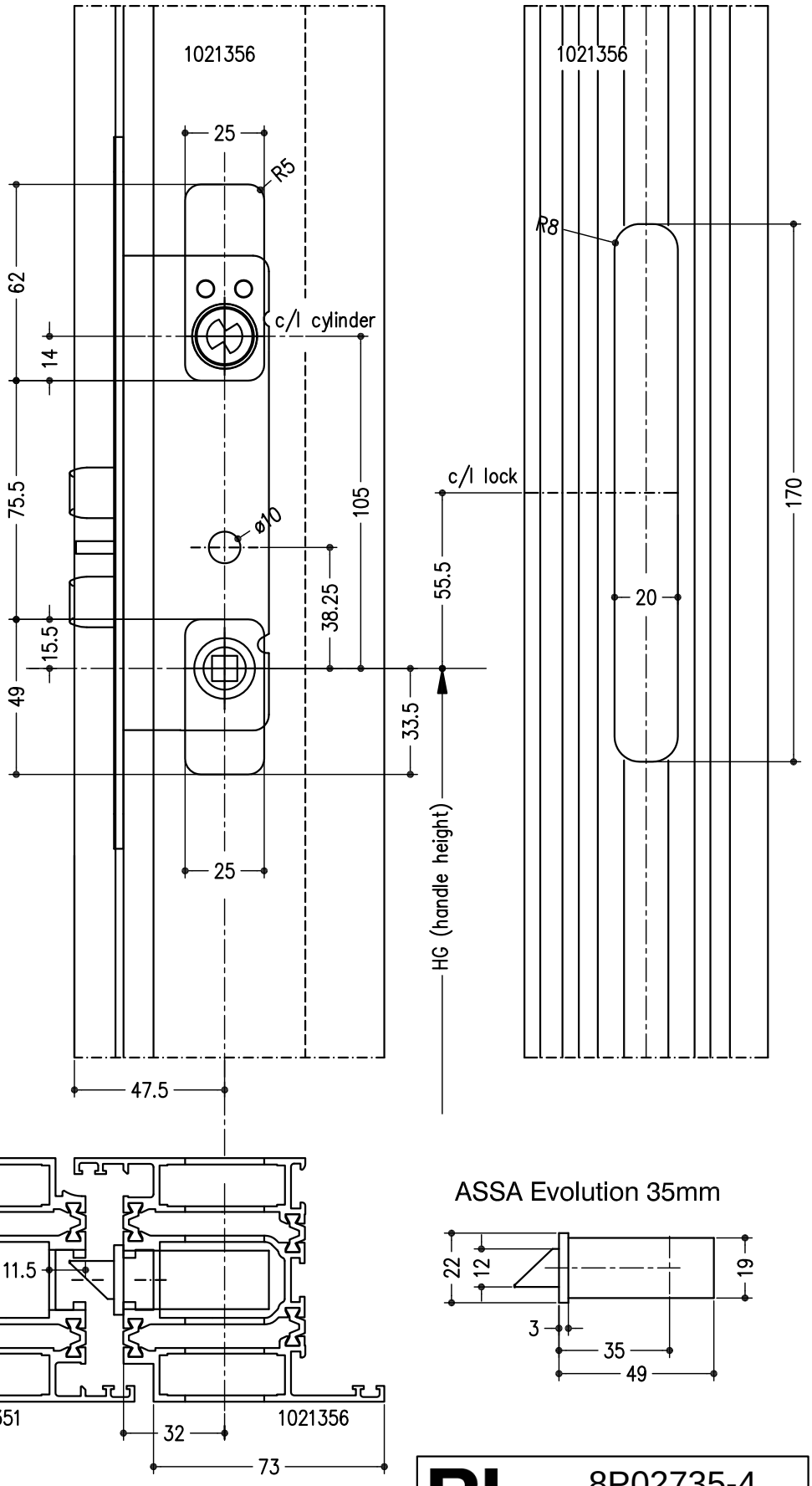
.

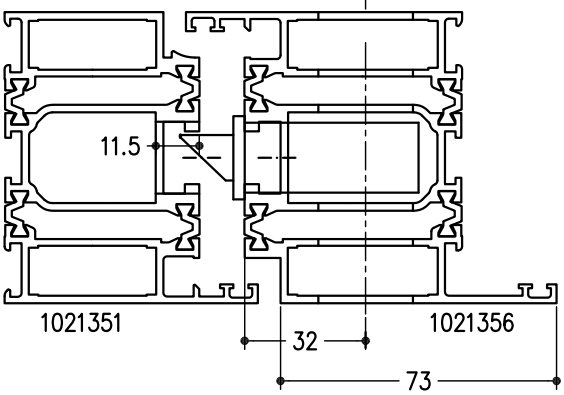
ASSA 212–35
ASSA 220–35
ASSA 221–35
ASSA 222–35
ASSA 223–35
ASSA 232–35
ASSA 235–35
ASSA 236–35

ASSA 340–35

ASSA 620–35
ASSA 621–35
ASSA 622–35
ASSA 624–35
ASSA 636–35
ASSA 640–35

ASSA 721–35
ASSA 722–35
ASSA 727–35
ASSA 732–35





ASSA Evolution 35mm

Valid for outward opening and lock connect 35mm

.

RI. SE REF: 8P02735-4
APP: 1 (23 pages)

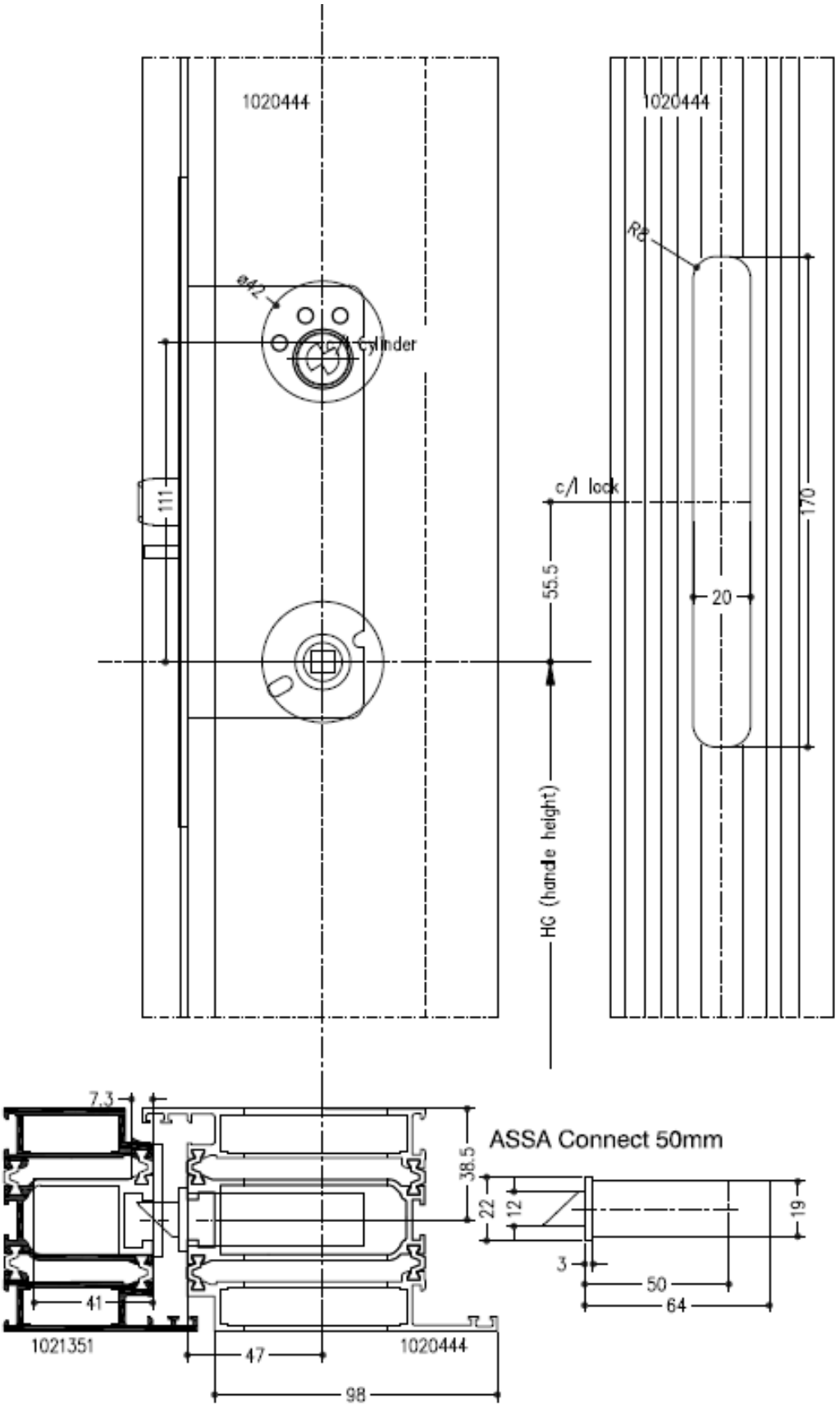
WICSTYLE 77FP EI60

Electric lock

RI. SE REF: 8P02735-4

APP: 1 (23 pages)

STEP 110
STEP 120
ASSA 840C-50
ASSA 841C-50
ASSA 850C-50
ASSA 851C-50
ASSA 841C-35
ASSA 851C-35



WICSTYLE 77FP EI60

Lock acording SS 81 73 83, NS 3155, SFS 5208

ASSA 565-50

ASSA 212-50

Dorma DL710-50

Narrow lock

ASSA 1398-28

Dorma DL610-28

ASSA 212-35

solenoid lock

STEP110/120

ASSA 840C-50

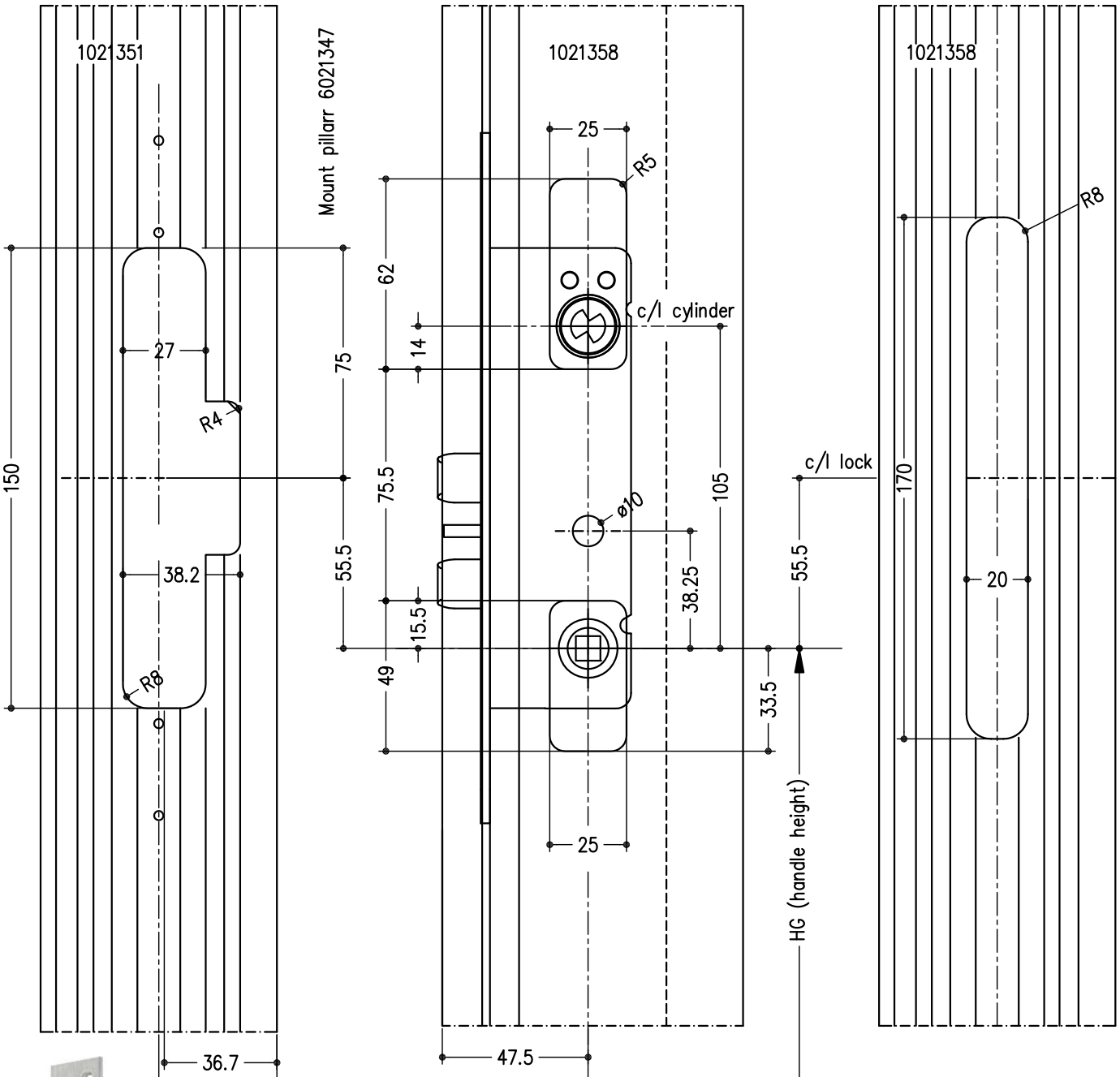
ASSA 841C-35

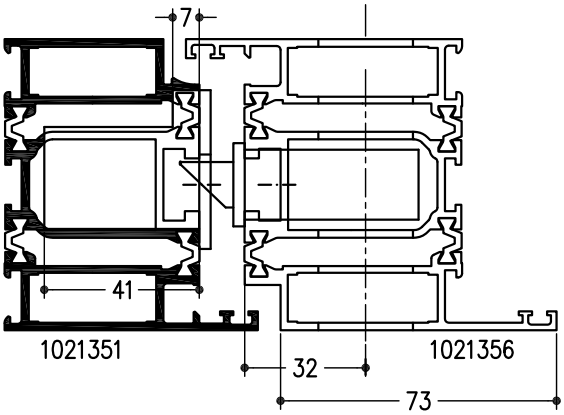
RI. SE REF: 8P02735-4

APP: 1 (23 pages)

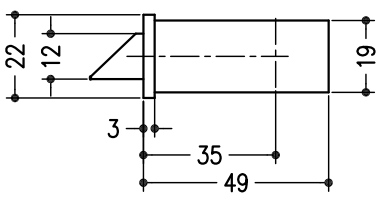
WICSTYLE 77FP EI60

Hinged doors, open in, installation of ASSA Evolution 35mm
and installation of Mount pillar SOLID 917-W





ASSA Evolution 35mm



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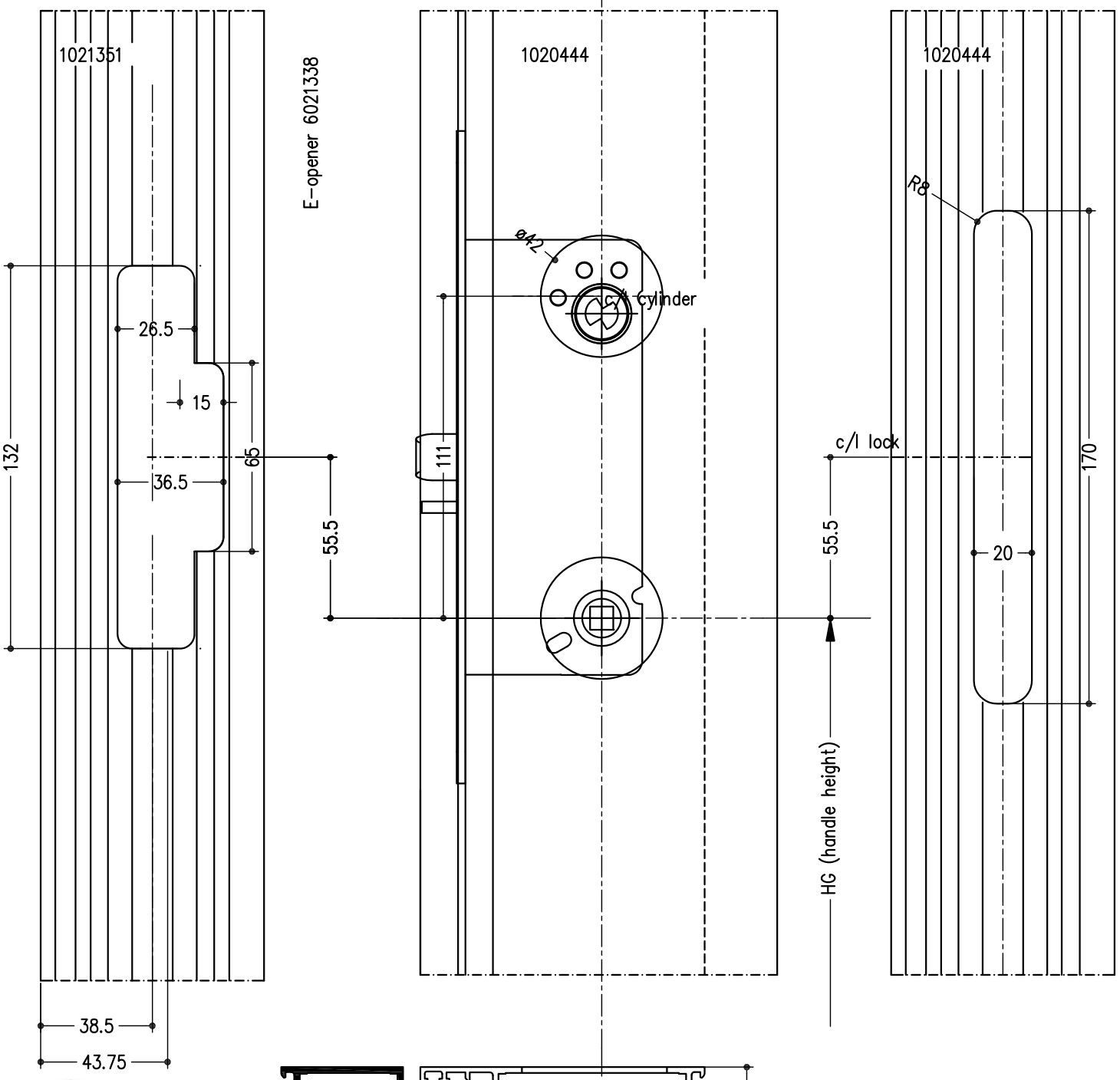
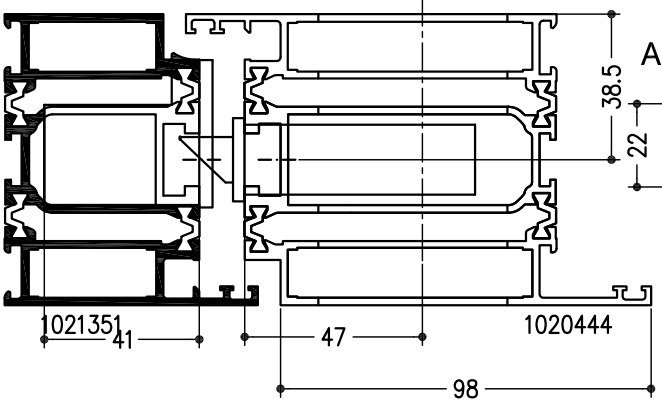
APP: 1 (23 pages)

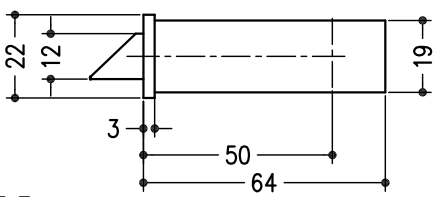
WICSTYLE 77FP EI60

Hinged doors, open in, installation of ASSA Evolution 50mm
and installation of Mount pillar T78, and SA72, SB780,





ASSA Evolution 50mm



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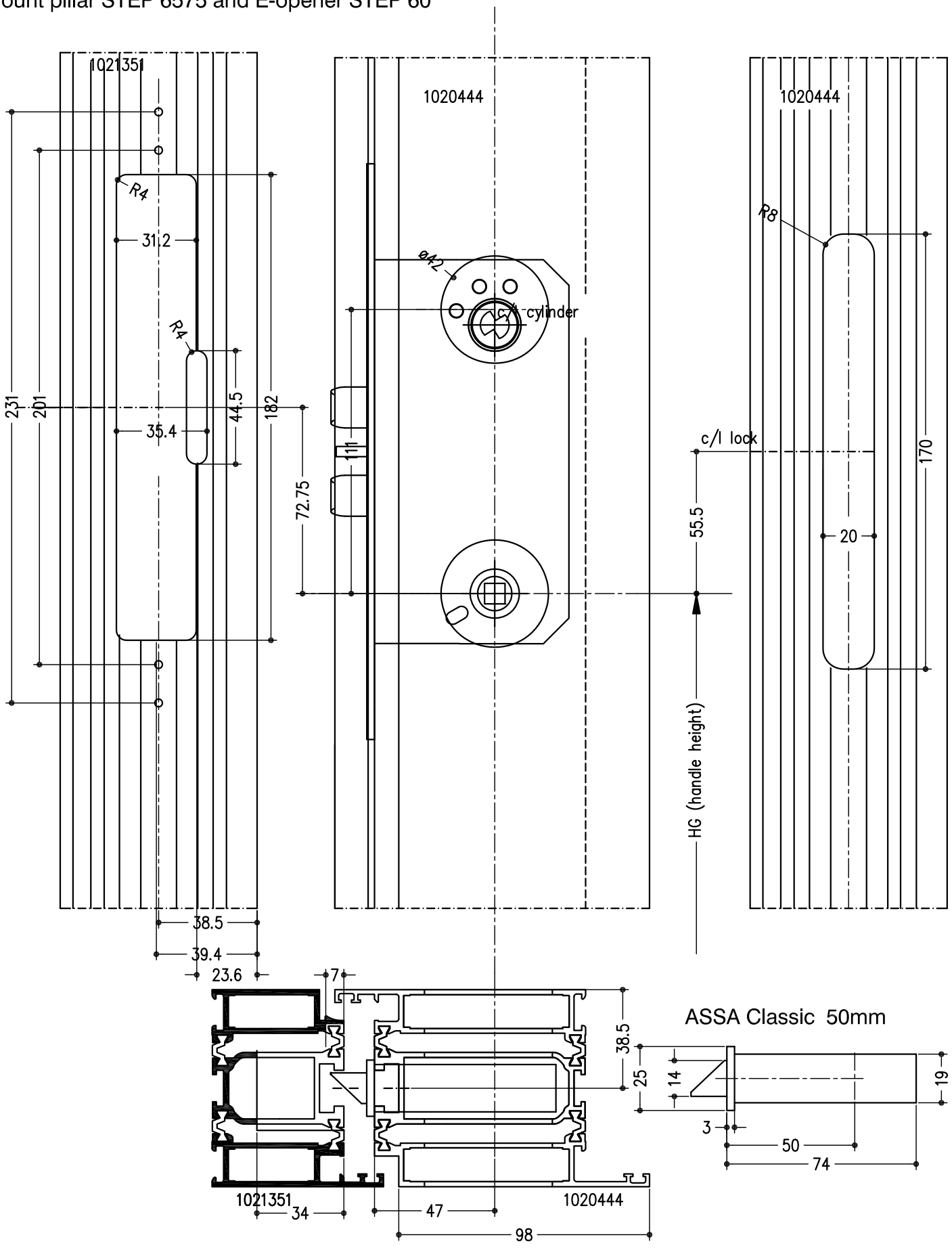
RI. SE REF: 8P02735-4

APP: 1 (23 pages)

WICSTYLE 77FP EI60

Hinged doors, open in, (out) installation of STEP100 lock Classic backset 50mm
Mount pillar STEP 6575 and E-opener STEP 60

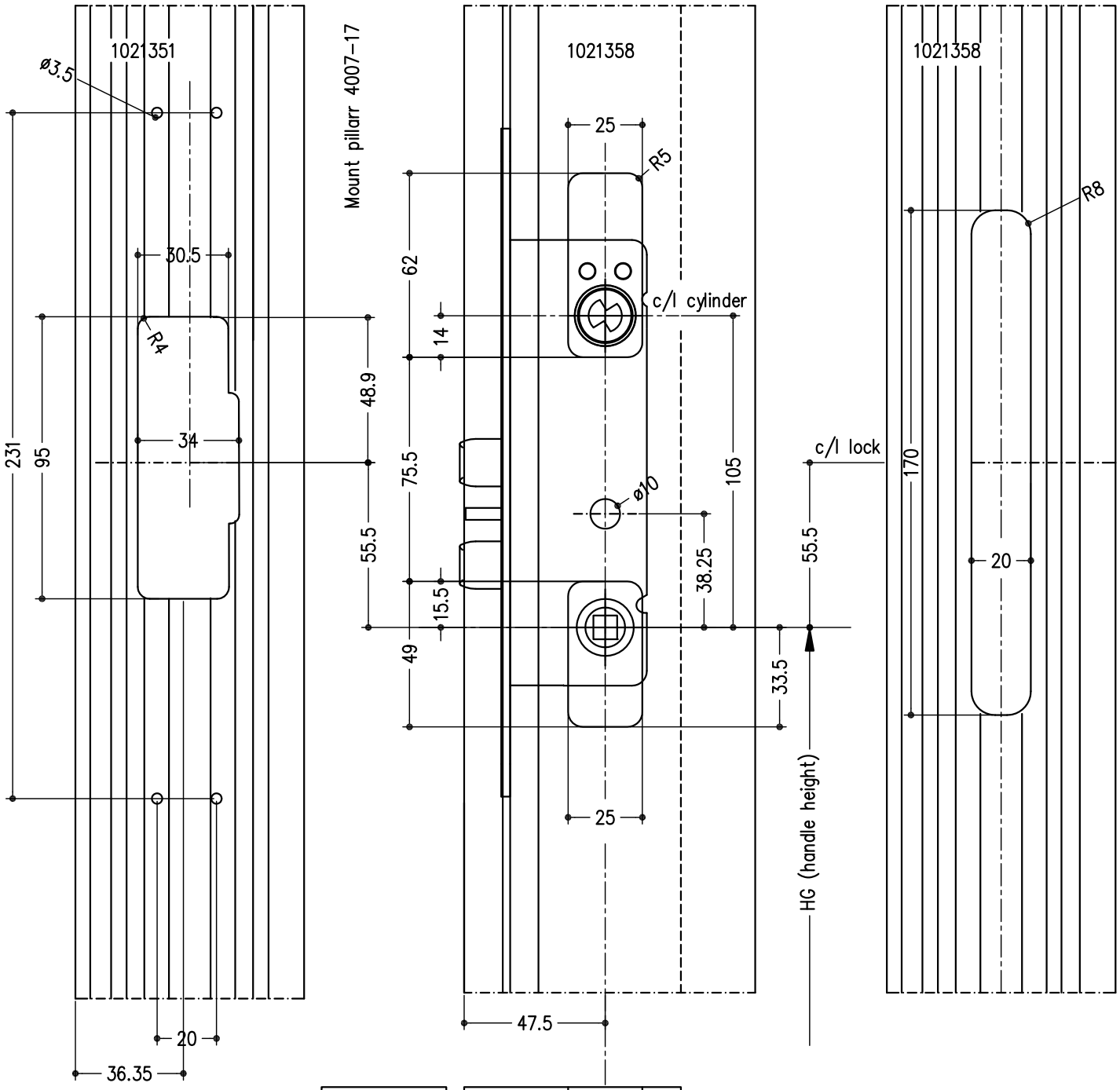


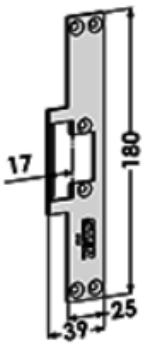
Valid for outward opening and lock Classic 50mm

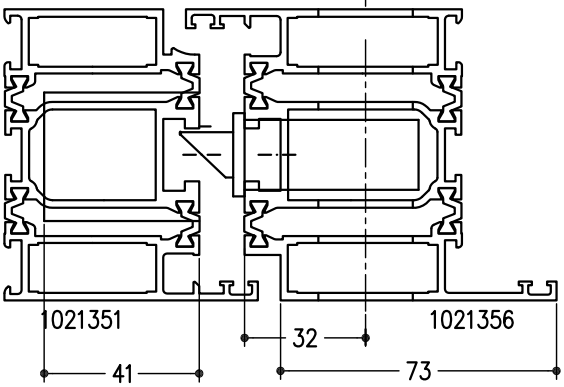
RISE REF: 8P02735-4
APP: 1 (23 pages)

WICSTYLE 77FP EI60

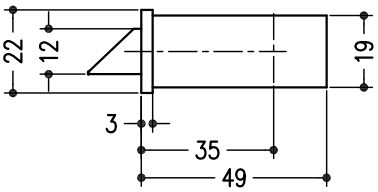
Hinged doors, open in, installation of ASSA Evolution 35mm
and installation of Mount pillar STEP ST4007-17 E-opener STEP 90/ STEP 98







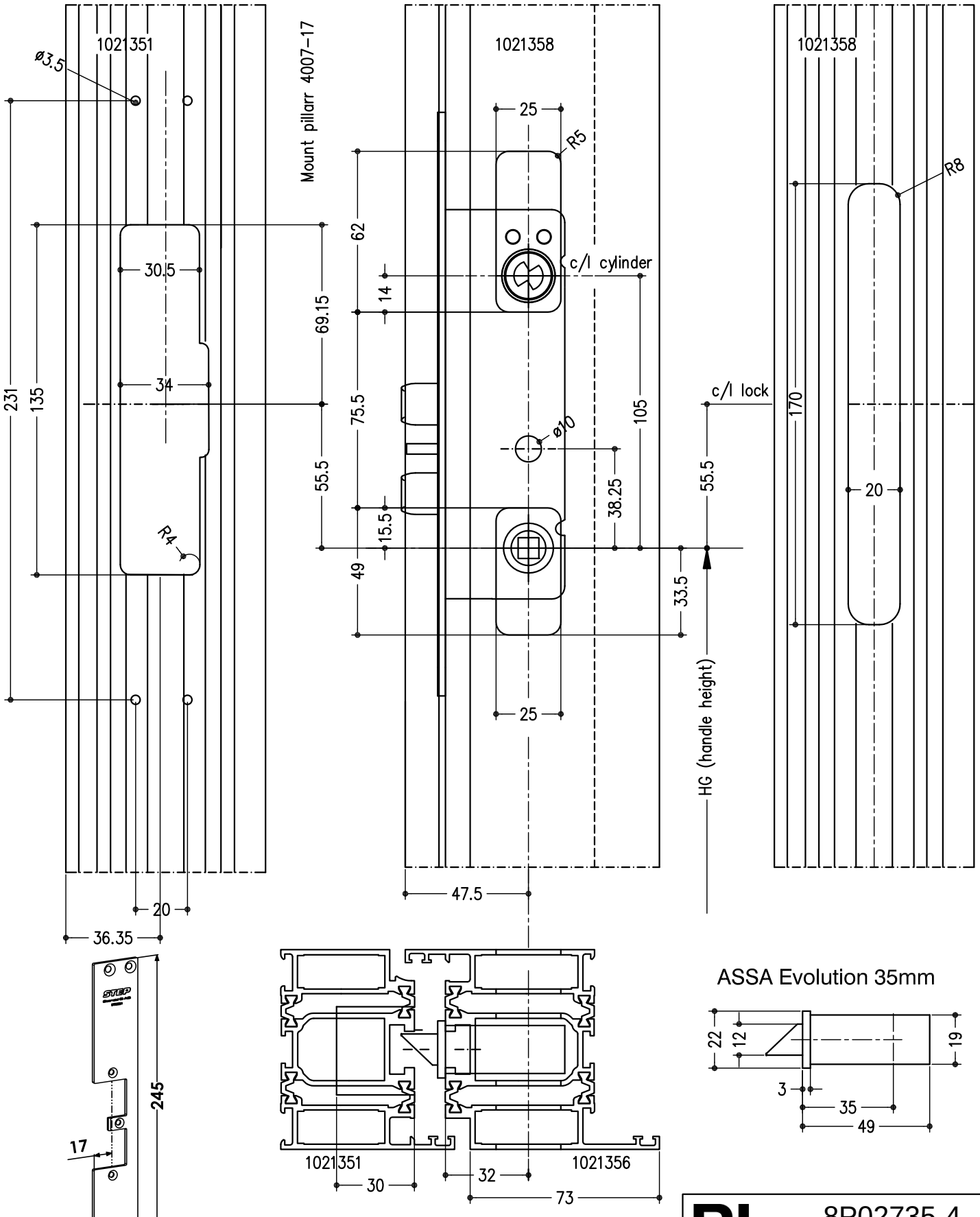
ASSA Evolution 35mm



RI. SE REF: 8P02735-4
APP: 1 (23 pages)

WICSTYLE 77FP EI60

Hinged doors, open in, installation of ASSA Evolution 35mm
and installation of Mount pillar STEP ST9503-17 E-opener STEP 92



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WS77FPexap_ST92-9503-17

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APP: 1 (23 pages)

WICSTYLE 77FP EI60

E-opener to EN 14846:2008

RI. SE REF: 8P02735-4
APP: 1 (23 pages)

Solid elslutbleck

Elsutbleck 920 passar till
stolpe 917W

Elslutbleck 960 passar till
stolpe 917W

STEP 92 preload passar
till stolpe 9503-17

ROBUSTT elslutbleck

Robust elsutbleck 300 serien
passar till stolpe SA72

STEP elslutbleck

STEP 60 silent passar
till stolpe 6558

STEP 90 preload / Release
passar till stolpe 4001-17

STEP 98 preload passar
till stolpe 4001-17

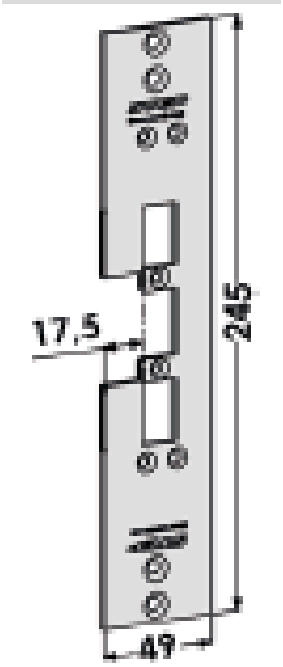
WICSTYLE 77FP EI60

Mount pillar for E-opener

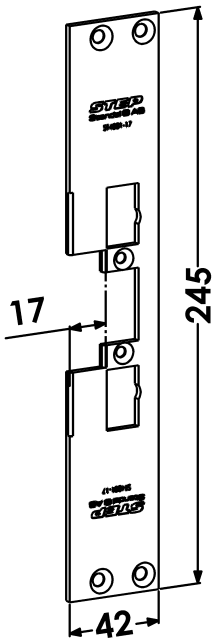
ASSA 917W

Robust SA72

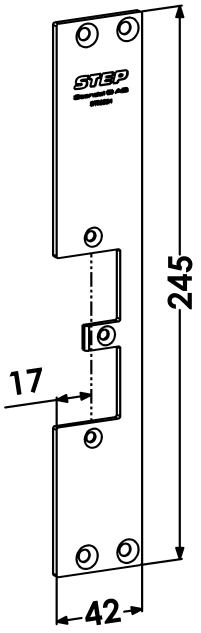
ST 6575-17.5



ST 4001-17



ST 9503-17



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REF: 8P02735-4

APP: 1 (23 pages)

WICSTYLE 77FP EI60

Striker plate

REF: 8P02735-4

APP: 1 (23 pages)

Striker plate ASSA for latch bolt lock ASSA classic

Striker plate ASSA for latch bolt lock ASSA Evolution

Assa 1487-9

Assa 1887-9

WICSTYLE 77FP EI60

Door closer to EN 1154

Assa DC 300
(Scissor arm)

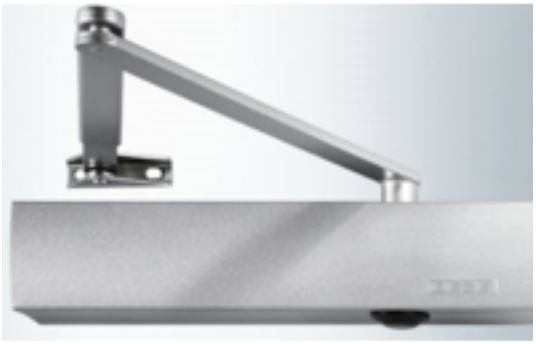
Assa DC 700
(Slide channel)

Dorma TS 83
(Scissor arm)

Dorma TS 93
(Slide channel)

Geze TS 2000
(Scissor arm)

Geze TS 4000
(Scissor arm)



RI. SE REF: 8P02735-4

APP: 1 (23 pages)

WICSTYLE 77FP EI60

Door coordinator to EN 1155 + A1:2007

RI. SE REF: 8P02735-4

APP: 1 (23 pages)

Geze ISM / L-ISM

(Coordinator)

WICSTYLE 77FP EI60

Door pull handle

Assa 325

Assa 138

Bäne 1807

Dorma 986

DH 986
C 400 mm
Monteringsset ingår.
7030000007535

Dorma 987

DH 987
D 400 mm
Monteringsset ingår.
7030000007537

Dorma 996

DH 996
C 350 mm
Monteringsset ingår.
7030000007532

Dorma 997

DH 997
D 350 mm
Monteringsset ingår.
7030000007533

Bäne 1811

Bäne 1812

Bäne 1818

Randi 1534

RI. SE REF: 8P02735-4

APP: 1 (23 pages)

WICSTYLE 77FP EI60

Door handle narrow profile connect

44159E S4

55059E S4

55859E S4

44459E S4

55459E S4

55959E S4

44859E S4

RI. SE

REF: 8P02735-4

APP: 1 (23 pages)

WICSTYLE 77FP EI60

Door handle module lock and cylinder hardware

Assa 6640 Classic

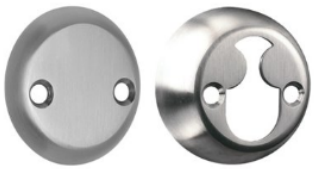
Assa 6696 Classic

9256

3212

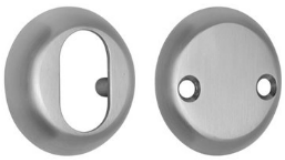
DH 903

18 256



2256

2256 Rostfritt



256

2356 Rostfritt

2356

256E

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APP: 1 (23 pages)

WICSTYLE 77FP EI60

Door cylinder hardware

Triton 5900

Triton 2900

dp 4400

dp 2400

Combi 4800

Combi 1800

Neptun 4900

Neptun 1900

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APP: 1 (23 pages)

WICSTYLE 77FP EI60

Panic exit device EN 1125 Active door

Assa 1125

Panikregel 1130

Assa 1140

Assa 1150 active door

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APP: 1 (23 pages)

WICSTYLE 77FP EI60

Panic exit device EN 179 for modul lock

Assa 179A

Assa 179C

Assa 179/8563-2

Assa 179A-2

Assa 179D

Assa 179B

Assa 179E-2

Assa 179B-2

Assa 179/8563

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APP: 1 (23 pages)

WICSTYLE 77FP EI60

Panic exit device EN 179 for narrow lock

Assa 179A S4

Assa 179B-2 S4 DC

Assa 179A S4 DC

Assa 179A-2 S4 DC

Assa 179B S4

Assa 179B S4 DC

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APP: 1 (23 pages)